

CLAIMS

Having thus described our invention, what I claim as new and desire to secure by Letters Patent is as follows:

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1. A system enabling a first device operatively communicable with at least a primary wireless network to transmit a device query to a wireless device operatively communicable with the primary wireless network and at least a secondary wireless

10 network, said system comprising:

a host computer, operatively communicable with the primary wireless network, capable of receiving a query from the first device;

a routing switch receiving the query from said host computer,
15 retrieving a profile of the wireless device comprising network data characteristic of communication requirements associated with the primary wireless network and the secondary wireless network with which the wireless device is communicable, appending to the query a first
20 transmission header characteristic of first communication requirements associated with the primary wireless network, transmitting the query and the first transmission header to the primary wireless network and, responsive to the profile after a predetermined number of transmission
25 attempts in the primary wireless network, appending a

second transmission header characteristic of second communication requirements associated with the secondary wireless network to the query in accordance with a communication protocol used by the secondary wireless network, and transmitting the query and the second transmission header to the secondary wireless network; and a switch operatively communicable with the secondary wireless network for receiving the query and the second transmission header transmitted by said routing switch, transmitting the query and at least a portion of the second transmission header to the wireless device via the secondary wireless network, and transmitting a query response from the wireless device to the first device.

2. The system according to claim 1, wherein said routing switch queues each query prior to transmitting to the secondary wireless network.

3. The system according to claim 1, wherein the query comprises at least one of a wireless device availability check, a roaming history report and a modem statistics report.

4. The system according to claim 1, wherein the first device is a wireless device registered with the primary wireless network.

5. The system according to claim 1, wherein the first device is a non-wireless device registered with the primary wireless network.

5 6. A system enabling a first device operatively communicable with at least a primary wireless network to query a wireless device operatively communicable with the primary wireless network and at least a secondary wireless network, said system comprising:

10 a primary wireless network comprising a routing switch receiving the query from the first device, retrieving a profile of the wireless device comprising network data characteristic of communication requirements associated with the primary wireless network and the secondary
15 wireless network with which the wireless device is communicable, appending to the query a first transmission header characteristic of internal routing and radio frequency communication requirements associated with the primary wireless network, transmitting the query and at
20 least a portion of the first transmission header to the wireless device in the primary wireless network and, responsive to the profile after a predetermined number of transmission attempts in the primary wireless network, appending a second transmission header characteristic of
25 second internal routing and radio frequency communication

requirements associated with the secondary network, and transmitting the query and the second transmission header to the secondary wireless network; and

a switch operatively communicable with the secondary wireless
5 network for receiving the query and the second
transmission header transmitted by said routing switch,
transmitting the query and at least a portion of the
second transmission header to the wireless device via the
secondary wireless network, and transmitting a query
10 response from the wireless device to the first device.

7. The system according to claim 6, wherein said routing switch queues each query prior to transmitting to the secondary wireless network.

15 8. The system according to claim 6, wherein the query comprises at least one of a wireless device availability check, a roaming history report and a modem statistics report.

20 9. The system according to claim 6, wherein the first device is a wireless device registered with at least the primary wireless network.

10. The system according to claim 6, wherein the first device is a non-wireless device registered with at least the primary wireless network.

- 5 11. A system for enabling a first device operatively communicable with at least a primary wireless network to query a wireless device operatively communicable with the primary wireless network and a secondary wireless network, said system comprising:
- 10 a host computer, operatively communicable with the primary wireless network, capable of receiving a query from the first device;
- the primary wireless network comprising a routing switch comprising:
- 15 a web server operatively communicable with said host computer for electronically formatting the query for transmission to the first device;
- a middleware server enabling said host computer to operatively communicate with said routing switch;
- 20 an internal routing server receiving the query from said host computer and appending to the query a transmission header characteristic of first communication requirements associated with the primary wireless network for internal routing within said primary
- 25 wireless network;

a request server retrieving a profile of the wireless device comprising data pertaining to at least the primary wireless network and the secondary wireless network with which the wireless device is communicable;

5 a routing server operatively communicable with said request server for appending to the transmission header a radio frequency header characteristic of first radio frequency communication requirements associated with the primary wireless network, transmitting the query and at

10 least a portion of the radio frequency header to the wireless device in the primary wireless network;

a complementary network server receiving at least the query from said routing server and appending to the query a second transmission header characteristic of

15 secondary internal routing and radio frequency communication requirements associated with the secondary wireless network; and

a switch operatively communicable with the secondary wireless network for receiving the query and the second

20 transmission header transmitted by said routing switch, transmitting the query and at least a portion of the second transmission header to the wireless device via the secondary wireless network, and transmitting a query response from the wireless device to the first device.

12. The system according to claim 11, wherein said routing switch further comprises a query server operatively communicable with at least one of said request server, said routing server, and said complementary network server that
5 manages the flow of each query from the primary wireless network to the secondary wireless network.

13. The system according to claim 11, wherein the query comprises at least one of a wireless device availability check,
10 a roaming history report and a modem statistics report.

14. The system according to claim 11, wherein the first device is a wireless device registered with the primary wireless network.

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15. The system according to claim 11, wherein the first device is a non-wireless device registered with the primary wireless network.

20 16. A system for enabling a first device operatively communicable with at least a primary wireless network to transmit a device query to a wireless device operatively communicable with the primary wireless network and at least a secondary wireless network, said system comprising:

a primary wireless network comprising a routing switch comprising:

a web server electronically formatting the query for transmission to the first device;

5 a middleware server enabling the first device to operatively communicate with said routing switch;

an internal routing server receiving the query and appending to the query a first transmission header characteristic of first communication requirements associated with the primary network for internal routing within the primary wireless network;

10 a request server retrieving a profile of the wireless device comprising network data characteristic of first communication requirements associated with the primary wireless network and the secondary wireless network with which the wireless device is communicable;

15 a routing server operatively communicable with said request server adding a radio frequency header to the query, transmitting the query and the radio frequency header to the wireless device in the primary wireless network;

20 a complementary network server receiving at least the query from said routing server and, responsive to the profile and after a predetermined number of transmission attempts, appending to the query a second transmission

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header characteristic of communication requirements
associated with the secondary wireless network; and
a switch operatively communicable with the secondary
wireless network for receiving the query and at least a
5 portion of the second transmission header transmitted by
said routing switch, transmitting the query and at least
a portion of the second transmission header to the
wireless device via the secondary wireless network, and
transmitting a query response from the wireless device
10 to the first device.

17. The system according to claim 16, wherein said routing
switch further comprises a query queue operatively communicable
with at least one of said request server, said routing server,
15 and said complementary network server that manages the flow of
each query from the primary wireless network to the secondary
wireless network.

18. The system according to claim 16, wherein the query
20 comprises at least one of a wireless device availability check,
a roaming history report and a modem statistics report.

19. The system according to claim 16, wherein the first
device is a wireless device registered with the primary
25 wireless network.

20. The system according to claim 16, wherein the first device is a non-wireless device registered with at least the primary wireless network.

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21. A system for enabling a first device operatively communicable with at least a primary wireless network to transmit a device query to a wireless device operatively communicable with the primary wireless network and at least a
10 secondary wireless network, said system comprising:

a host computer, operatively communicable with the primary wireless network, capable of receiving a query from the first device;

the primary wireless network comprising a routing switch
15 comprising:

at least a first line handler for receiving the query from said host computer;

a web server, operatively communicable with said host computer via said at least one first line handler,
20 electronically formatting the query for transmission to the wireless device;

a middleware server enabling said host computer to communicate with said routing switch via said at least one first line handler;

a request server retrieving a profile of the wireless device comprising network data characteristic of communication requirements associated with the primary wireless network and the secondary wireless network with which the wireless device is communicable;

a routing server, operatively communicable with said request server, adding a radio frequency header to the query;

at least a second line handler for receiving the query from said routing server, and transmitting the query and at least a portion of the radio frequency header to the wireless device in the primary wireless network;

a complementary network server receiving at least the query from said routing server and adding a second transmission header to the query in accordance with a communication protocol used by the secondary wireless network; and

at least a third line handler for receiving at least the query from said complementary network server and transmitting at least the query to the secondary wireless network; and

a switch operatively communicable with the secondary wireless network for receiving the query and at least a portion of the second transmission header transmitted by said routing switch, transmitting the query and at least a portion of

the second transmission header to the wireless device via the secondary wireless network, and transmitting a query from the wireless device to the first device.

5 22. The system according to claim 21, wherein said routing switch further comprises a query queue operatively communicable with at least one of said request server, said routing server, and said complementary network server that manages the flow of each query from the primary wireless network to the secondary
10 wireless network.

23. The system according to claim 21, wherein the query comprises at least one of a wireless device availability check, a roaming history report and a modem statistics report.

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24. The system according to claim 21, wherein the first device is a wireless device registered with at least the primary wireless network.

20 25. The system according to claim 21, wherein the first device is a non-wireless device registered with at least the primary wireless network.

26. A system for enabling a first device operatively
25 communicable with at least a primary wireless network to

transmit a device query to a wireless device operatively communicable with the primary wireless network and at least a secondary wireless network, said system comprising:

a primary wireless network comprising a routing switch

5 comprising:

at least a first line handler for receiving the device query;

a request server retrieving a profile of the wireless device comprising network data pertaining to at least the primary wireless network and the secondary wireless network with which the wireless device is communicable;

10 a routing server operatively communicable with said request server for adding a radio frequency header to the query;

15 at least a second line handler for receiving the query from said routing server, and transmitting the query and at least a portion of the radio frequency header to the wireless device in the primary wireless network;

a complementary network server receiving the query from said routing server and, after receiving a predetermined number of transmission attempts via said at least one second line handler, appending a transmission header to the query in accordance with a communication protocol used by the secondary wireless network; and

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at least a third line handler for receiving the query and
at least a portion of the transmission header from said
complementary network server and transmitting the query
and the transmission header to the secondary wireless
5 network; and

a switch operatively communicable with the secondary
wireless network for receiving the query and the
transmission header transmitted by said routing switch,
transmitting the query and at least a portion of the
10 transmission header to the wireless device via the
secondary wireless network, and transmitting a query
response from the wireless device to the first device.

27. The system according to claim 26, wherein said routing
15 switch further comprises a queue operatively communicable with
at least one of said request server, said routing server, and
said complementary network server that manages the flow of each
query from the primary wireless network to the secondary
wireless network.

20 28. The system according to claim 26, wherein the query
comprises at least one of a wireless device availability check,
a roaming history report and a modem statistics report.

29. The system according to claim 26, wherein the first device is a wireless device registered with at least the primary wireless network.

5 30. The system according to claim 26, wherein the first device is a non-wireless device registered with at least the primary wireless network.

31. A system enabling a first device operatively communicable
10 with at least a primary wireless network to transmit a device query to a wireless device operatively communicable with the primary wireless network and at least a secondary wireless network, said system comprising:

a primary wireless network comprising a routing switch for:

- 15 a) receiving the wireless device query;
- b) retrieving a profile of the wireless device comprising network data pertaining to at least the primary wireless network and the secondary wireless network with which the wireless device is communicable;
- 20 c) determining whether the wireless device last used the primary or secondary wireless network;
- d) adding a radio frequency header to the query in accordance with the last used network as determined in said part c);

e) transmitting the query to the wireless device in the network as determined in said part c);

f) adding, after a predetermined number of transmission attempts to the primary network, a transmission header in accordance with a communication protocol used by at least one of the primary and secondary wireless network to which the query has not yet been transmitted;

g) transmitting the query to the wireless device in network as determined in said part f); and

a switch operatively communicable with the secondary wireless network for receiving the query and at least a portion of the message transmission header transmitted by said routing switch, transmitting the query and the message transmission header to the wireless device via the secondary wireless network, and transmitting a query response from the wireless device to the first device.

32. A method for enabling a first device operatively communicable with at least a primary wireless network to query a wireless device operatively communicable with the primary wireless network and at least a secondary wireless network, said method comprising the steps of:

transmitting a query from the first device to at least the primary wireless network;

retrieving a profile of the wireless device, the profile comprising data pertaining to at least the primary wireless network and the secondary wireless network with which the wireless device is communicable;

5 adding a radio frequency header to the query;

transmitting the query and at least a portion of the radio frequency header to the wireless device in the primary wireless network;

adding, after a predetermined number of transmission

10 attempts, a second transmission header characteristic of second communication requirements associated with the secondary network to the query in accordance with a communication protocol used by the secondary wireless network;

15 transmitting the query and at least a portion of the second transmission header to the secondary wireless network;

receiving the query at the secondary wireless network and further transmitting the query to the wireless device via the secondary wireless network; and

20 displaying the results of the query at the first device.

33. The method according to claim 32, further comprising the step of queuing each query prior to transmitting to at least one of the primary and secondary wireless networks.

34. The method according to claim 32, wherein the query comprises at least one of a wireless device availability check, a roaming history report and a modem statistics report.

5 35. The method according to claim 32, wherein the first device is a wireless device registered with at least the primary wireless network.

10 36. The method according to claim 32, wherein the first device is a non-wireless device registered with at least the primary wireless network.

15 37. A method for enabling a first device operatively communicable with at least a primary wireless network to transmit a query to a wireless device operatively communicable with the primary wireless network and at least a secondary wireless network, said method comprising the steps of:

- a) transmitting a query from the first device to at least the primary wireless network, wherein the query comprises at least one of a device availability check, a roaming history report and a modem statistics report;
 - b) retrieving a profile of the wireless device comprising network data pertaining to at least the primary wireless network and the secondary wireless network with which the wireless device is communicable;
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- c) determining at least one of the primary and secondary wireless network with which the wireless device was last communicating;
- d) adding a first transmission header to the query in
5 accordance with network communication requirements as determined in said step c);
- e) transmitting the query and at least a portion of the radio frequency header to the wireless device in the network as determined in said step c);
- 10 f) adding, after a predetermined number of transmission attempts, a second transmission header in accordance with a communication protocol used by at least one of the primary and secondary wireless networks to which the query has not yet been transmitted;
- 15 g) transmitting the query and at least a portion of the second transmission header to the wireless device in the wireless network as determined in said step f); and
- h) displaying the results of the query at the first device.

20 38. A method for enabling a first device operatively communicable with at least a primary wireless network to query a wireless device operatively communicable with the primary wireless network and at least a secondary wireless network, said method comprising:

transmitting a query from the first device to at least the
primary wireless network;

attaching to the query a transmission header for internal
routing within the primary wireless network;

5 retrieving a profile of the wireless device comprising data
pertaining to at least the primary wireless network and
the secondary wireless network with which the wireless
device is communicable;

adding a radio frequency header to the query;

10 transmitting the query and at least a portion of the radio
frequency header to the wireless device in the primary
wireless network;

adding, after a predetermined number of transmission
attempts, a second transmission header to the query in
15 accordance with a communication protocol used by the
secondary wireless network;

transmitting the query to the wireless device via the
secondary wireless network; and

displaying the results of the query at the first device.

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39. The method according to claim 38, further comprising the
step of queuing queries prior to transmitting to the wireless
device in the primary wireless network and the secondary
wireless network.

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40. The method according to claim 38, wherein the query comprises at least one of a wireless device availability check, a roaming history report and a modem statistics report.

5 41. The method according to claim 38, wherein the first device is a wireless device registered with at least the primary wireless network.

10 42. The method according to claim 38, wherein the first device is a non-wireless device registered with at least the primary wireless network.

15 43. A method for enabling a first device operatively communicable with at least a primary wireless network to transmit a query to a wireless device operatively communicable with the primary wireless network and at least a secondary wireless network, said method comprising the steps of:

transmitting a query from the first device to a host computer operatively communicable with the primary wireless

20 network;

providing at least a first line handler for receiving the query from the host computer;

retrieving a profile of the wireless device comprising network data pertaining to at least the primary wireless

network and the secondary wireless network with which the wireless device is communicable;

adding a first transmission header to the query;

transmitting the query and at least a portion of the first

5 transmission header to the wireless device in the primary wireless network;

adding, after a predetermined number of transmission

attempts, a second transmission header to the query in accordance with a communication protocol used by the

10 secondary wireless network;

transmitting the query and the second transmission header to the secondary wireless network;

transmitting the query and at least a portion of the second transmission header to the wireless device via the

15 secondary wireless network; and

displaying the query results on a display device operatively connected to the first device.

44. The method according to claim 43, further comprising the
20 step of queuing the query prior to transmission to at least one of the primary wireless network and the secondary wireless network.

45. The method according to claim 43, further comprising the steps of receiving a negative acknowledgement message from the secondary wireless network.

5 46. The method according to claim 43, wherein the first device is a wireless device registered with at least the primary wireless network.

10 47. The method according to claim 43, wherein the first device is a non-wireless device registered with at least the primary wireless network.

48. A communication system enabling communication devices to query devices across complimentary networks, comprising:

15 a first communication device transmitting a query and communicating substantially consistent with a first communication format;

 a primary wireless network operatively connected to, and directly communicating with, said first communication

20 device and receiving the query, said primary wireless network determining responsive to the query whether the query is to be transmitted within said primary wireless network, and when the query is to be transmitted within said primary wireless network, formatting the query to be

25 received substantially consistent with the first

communication format, routing the query to a device destination within said primary wireless network, and when the query is not to be transmitted within said primary wireless network, said primary wireless network formatting the query in accordance with a second communication format and routing the query to a network destination, optionally via the primary wireless communication;

a second communication device not capable of directly communicating with said primary wireless network and communicating in accordance with the second communication format;

a secondary wireless network operatively connected to, and directly communicating with, said second communication device and said primary wireless network, said secondary wireless network receiving the query from said primary wireless network as the network destination when the query is not to be transmitted within said primary wireless network, optionally via secondary wireless communication and routing the query to said second communication device as the device destination responsive to said second communication format formatted by said primary wireless network.

49. The system according to claim 48, wherein said first communication device is at least one of a wireless device

registered with at least said primary wireless network and a non-wireless device registered with at least said primary wireless network.

5 50. The system according to claim 48, wherein the query comprises a second communication device availability check, a roaming history report and a modem statistics report.

10 51. A communication system enabling communication devices to communicate across complimentary networks, comprising:

 a first communication device transmitting a device query and communicating substantially consistent with a first communication format;

15 a primary wireless network operatively connected to, and directly communicating with, said first communication device and receiving the query, said primary wireless network determining responsive to the query whether the query is to be transmitted within said primary wireless network, and when the query is to be transmitted within
20 said primary wireless network, formatting the query to be received substantially consistent with the first communication format, transmitting the query to a device destination within said primary wireless network, and when the query is not to be transmitted within said primary
25 wireless network, said primary wireless network formatting

the query in accordance with a second communication format and transmitting the query to a network destination, optionally via the primary wireless communication;

a second communication device not capable of directly

5 communicating with said primary wireless network and communicating in accordance with the second communication format;

a secondary wireless network operatively connected to, and directly communicating with, said second communication

10 device and said primary wireless network, said secondary wireless network receiving the query from said primary wireless network as the network destination when the query is not to be transmitted within said primary wireless network, optionally via secondary wireless communication
15 and transmitting the query to said second communication device as the device destination responsive to said second communication format formatted by at least in part by said primary wireless network.

20 52. The system according to claim 51, wherein said first communication device is at least one of a wireless device registered with at least said primary wireless network and a non-wireless device registered with at least said primary wireless network.

53. The system according to claim 51, wherein the query comprises a second communication device availability check, a roaming history report and a modem statistics report.

5 54. A communication system enabling communication devices to communicate across complimentary networks, comprising:

a first communication device transmitting a device query and communicating in accordance with a first communication format;

10 a primary wireless network operatively connected to, and directly communicating with, said first communication device and receiving the query, said primary wireless network determining responsive to the query whether the query is to be transmitted within said primary wireless
15 network and outside said primary wireless network, and when the query is to be transmitted within said primary wireless network, formatting the query to be received in accordance with the first communication format, routing the query to a device destination within said primary
20 wireless network via primary wireless communication, and when the query is to be transmitted outside said primary wireless network, optionally in addition to routing the query within said primary wireless network, said primary wireless network formatting the query in accordance with a

second communication format and routing the query outside
said primary wireless network;

a second communication device not capable of directly
communicating with said primary wireless network and
5 communicating in accordance with the second communication
format;

a secondary wireless network operatively connected to, and
directly communicating with, said second communication
device and said primary wireless network, said secondary
10 wireless network receiving the query from said primary
wireless network and routing the query to said second
communication device responsive to said second
communication format formatted by said primary wireless
network.

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55. The system according to claim 54, wherein the first
communication device is at least one of a wireless device
registered with at least said primary wireless network and a
non-wireless device registered with at least said primary
20 wireless network.

56. The system according to claim 54, wherein the query
comprises at least one of a second communication device
availability check, a roaming history report and a modem
25 statistics report.

57. A communication system enabling communication devices to communicate across complimentary networks, comprising:

a first communication device transmitting a device query and communicating in accordance with a first communication format;

a primary wireless network operatively connected to, and directly communicating with, said first communication device and receiving the query, said primary wireless network determining responsive to the query whether the query is to be transmitted within said primary wireless network and outside said primary wireless network, and when the query is to be transmitted within said primary wireless network, formatting the query to be received in accordance with the first communication format,

transmitting the query to a device destination within said primary wireless network via primary wireless communication, and when the query is to be transmitted outside said primary wireless network, optionally in addition to the transmitting the query within said primary wireless network, said primary wireless network formatting the query in accordance with a second communication format and transmitting the query outside said primary wireless network;

a second communication device not capable of directly communicating with said primary wireless network and

communicating in accordance with the second communication format;

a secondary wireless network operatively connected to, and directly communicating with, said second communication device and said primarily wireless network, said secondary wireless network receiving the query from said primary wireless network and transmitting the query to the second communication device responsive to said second communication format formatted by said primary wireless network.

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58. The system according to claim 57, wherein the first communication device is at least one of a wireless device registered with at least said primary wireless network and a non-wireless device registered with at least said primary wireless network.

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59. The system according to claim 57, wherein the query comprises at least one of a second communication device availability check, a roaming history report and a modem statistics report.

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60. A system enabling a first device operatively communicable with at least a primary wireless network to transmit a device query to a wireless device operatively communicable with said

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primary wireless network and at least a secondary wireless network, the query comprising at least one of a wireless device availability check, a roaming history report and a modem statistics report, said system comprising:

5 means for processing, operatively communicable with said primary wireless network, a device query from the first device;

said primary wireless network comprising switching means for:

receiving the query from said means for processing;

10 reading a profile of the wireless device comprising data pertaining to at least the primary wireless network and the secondary wireless network with which the wireless device is communicable;

adding a first transmission header to the query;

15 transmitting the query and at least a portion of the first transmission header to the wireless device in the primary wireless network;

adding, after a predetermined number of transmission attempts, a second transmission header to the query in
20 accordance with a communication protocol used by the secondary wireless network; and

transmitting the query and at least a portion of the second transmission header to the secondary wireless network; and

a switch operatively communicable with the secondary wireless network for receiving the query and at least a portion of the second transmission header transmitted by said switching means, transmitting the query and at least a portion of the second transmission header to at least one of the wireless device via the secondary wireless network, and transmitting the query result to said routing switch for display at the first device.

61. A system for enabling a first device operatively communicable with at least a primary wireless network to transmit a device query a wireless device operatively communicable with the primary wireless network and at least a secondary wireless network, the device query comprising at least one of a device availability check, a roaming history report and a modem statistics report, said system comprising:

means for processing, operatively communicable with the primary wireless network, a device query from the first device;

said primary wireless network comprising a routing switch comprising:

an internal routing server receiving the query from said means for processing and attaching to the query a transmission header for internal routing within the primary wireless network;

a request server retrieving a profile of the wireless device comprising data pertaining to at least the primary wireless network and the secondary wireless network with which the wireless device is communicable;

5 a routing server operatively communicable with said request server adding a radio frequency header to the query, transmitting the query to the wireless device in the primary wireless network;

a complementary network server for receiving the query,

10 after a predetermined number of transmission attempts, from said routing server and adding a second transmission header to the query in accordance with a communication protocol used by the secondary wireless network; and

15 means for switching, operatively communicable with the primary and secondary wireless networks, receiving the query transmitted by said complementary network server, transmitting the query to the wireless device via the secondary wireless network, and transmitting the query

20 results to said routing switch; and

display means operatively connected to the first device for displaying the query result.

62. In a data communication system having a first device

25 operatively communicable with at least a primary wireless

network to transmit a device query to a wireless device
operatively communicable with the primary wireless network and
at least a secondary wireless network, wherein the system has
means for processing, operatively communicable with the primary
5 wireless network and capable of receiving a query from the
first device, and wherein the primary wireless network has: a
routing switch comprising an internal routing server receiving
the query from the means for processing and attaching to the
query transmission headers for internal routing within the
10 primary wireless network, a request server retrieving a profile
of the wireless device comprising data pertaining to at least
the primary wireless network and the secondary wireless network
with which the wireless device is communicable, a routing
server operatively communicable with the request server for
15 adding a radio frequency header to the query, transmitting the
query and at least a portion of the radio frequency header to
the wireless device in the primary wireless network and, a
complementary network server for receiving, after a
predetermined number of transmission attempts, the query from
20 the routing server and adding a second transmission header to
the query in accordance with a communication protocol used by
the secondary wireless network, and wherein the secondary
wireless network has means for switching, operatively
communicable with the secondary wireless network, that receives
25 the query and at least a portion of the second transmission

header transmitted by the complementary network server and transmits the query to the wireless device via the secondary wireless network, a method of enabling the first device to transmit a query to the wireless device, said method comprising

5 the steps of:

transmitting a device query from the first device to at least the primary wireless network;

retrieving a profile of the wireless device, the profile comprising data pertaining to at least the primary

10 wireless network and the secondary wireless network with which the wireless device is communicable;

adding a first transmission header to the query;

transmitting the query and at least a portion of the first transmission header to the wireless device in the primary

15 wireless network;

adding, after a predetermined number of transmission attempts, a second transmission header to the query in accordance with a communication protocol used by the secondary wireless network;

20 transmitting the query and at least a portion of the second transmission header to the secondary wireless network;

receiving the query at the secondary wireless network and further transmitting the query to the wireless device via the secondary wireless network; and

25 displaying the results of the query at the first device.

63. A system for enabling a first device operatively communicable with at least a primary wireless network to query a wireless device, said system comprising:

5 a host computer, operatively communicable with the primary wireless network, capable of receiving a query from the first device;

the primary wireless network comprising a routing switch comprising:

10 a middleware server enabling said host computer to operatively communicate with said routing switch;
an internal routing server receiving the query from said host computer and attaching to the query transmission headers for internal routing within said primary
15 wireless network;

a request server retrieving a profile of the wireless device;

a routing server operatively communicable with said request server adding a radio frequency header to the
20 query and transmitting the query and at least a portion of the radio frequency header to the wireless device;

a query server operatively communicable with at least one of said request server, said routing server, and said complementary network server managing the flow of each
25 query from the first device to the wireless device; and

a web server operatively communicable with said host
computer and said query server for electronically
formatting query results for transmission to the first
device and transmitting query results to the first
5 device.

64. The system according to claim 63, wherein the query
comprises at least one of a wireless device availability check,
a roaming history report and a modem statistics report.
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65. The system according to claim 63, wherein the first
device is a wireless device.

66. The system according to claim 63, wherein the first
15 device is a non-wireless device.

67. A system for enabling a first device operatively
communicable with at least a primary wireless network to
transmit a device query to a wireless device, said system
20 comprising:

a host computer, operatively communicable with the primary
wireless network, receiving a query from the first device;
the primary wireless network comprising a routing switch
comprising:

at least a first line handler for receiving the query from
said host computer;
a middleware server enabling said host computer to
operatively communicate with said routing switch via a
5 first line handler;
a request server retrieving a profile of the wireless
device;
a routing server operatively communicable with said
request server for appending a radio frequency header to
10 the query;
at least a second line handler for receiving the query and
the radio frequency header from said routing server; and
a web server operatively communicable with said host
computer and said query server for electronically
15 formatting query results for transmission to the first
device and transmitting query results from the wireless
device to the first device.

68. The system according to claim 67, wherein said routing
20 switch further comprises a query queue operatively communicable
with at least one of said request server and said routing
server that manages the flow of each query.

69. The system according to claim 67, wherein the query comprises at least one of a wireless device availability check, a roaming history report and a modem statistics report.

5 70. The system according to claim 67, wherein the first device is a wireless device.

71. The system according to claim 67, wherein the first device is a non-wireless device.

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72. A method for enabling a first device operatively communicable with at least a primary wireless network to transmit a device query to a wireless device, said method comprising:

15 transmitting a query via a first device, the query being transmitted to a routing switch within the network via a host computer operatively connected thereto;
receiving the query at the routing switch from the host computer via at least a first line handler, said routing
20 switch performing the steps of:
retrieving a profile of the wireless device;
adding a radio frequency header to the query;
transmitting the query and at least a portion of the radio
frequency header to the wireless device via at least a
25 second line handler;

electronically formatting query results from the wireless device for transmission to the first device; and transmitting query results to the first device.

5 73. The method according to claim 72, further comprising the step of queuing the query prior to transmitting the query to the wireless device.

74. The method according to claim 72, further comprising the
10 step of queuing the query results prior to transmitting the query results to the first device.

75. The method according to claim 72, wherein the query comprises at least one of a wireless device availability check,
15 a roaming history report and a modem statistics report.

76. The method according to claim 72, wherein the first device is a wireless device.

20 77. The method according to claim 72, wherein the first device is a non-wireless device.